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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,978	02/27/2004	Robert Bonthron Durward	THAS122504	6864
26389	7590	09/24/2007		
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347			EXAMINER DWIVEDI, VIKANSHA S	
			ART UNIT 3746	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/788,978

Applicant(s)

DURWARD, ROBERT BONTHRON

Examiner

Vikansha S. Dwivedi

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-15, 17-23, 25-37 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-15, 17-23, 25-37 and 39-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>attachment 1</u> .                     |

## DETAILED ACTION

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “thruster propulsion system”, “pigs” “capsules” should be marked and must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Applicant has shown “thruster pigs” i.e. 6 in the drawings but not “pigs”. What part is the pigs and what part is the thruster propulsion system is not clear from the drawings and it should be properly marked and numbered for clear understanding of the claimed invention.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

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the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 6-15, 17-23, 25-37 and 39-43 are rejected under 35 U.S.C.

112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has failed to clearly define the structure of "pigs", "thruster propulsion system" and "thruster pigs". It is still not clear what are the pigs, commonly known meanings of pigs in the art are:

- 1) Iron Pig (Attachment 1)
- 2) Plunger (U.S. Patent number 4,596,516).

The thruster pigs as claimed by the applicant are not equipped with a propulsion system. Propulsion system is not on the pigs (Specification page 7-8).

Claims 1, 25 and 43 recites the limitation "the thruster pigs" in lines 5, 4 and 5 respectively. There is insufficient antecedent basis for this limitation in the claim. Proper correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-27 and claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Foreman et al. (U.S. patent number 5,127,773).

Foreman discloses a an apparatus for enhancing fluid velocity in a pipeline comprising: pigs (12) equipped with a thruster propulsion system (100) to propel them along a pipeline (14), a pipeline (14) having a holding zone (20) and a separation zone (10) in which the thruster pigs (12) are removed from the fluid flow; and means for driving thruster pigs sequentially through the pipeline (14) containing fluid at speeds in excess of that provided by a pressure system for the pipeline, such that the fluid is pushed by the thruster pigs and fluid is drawn by areas of low pressure created by the passage of the thruster pigs through the pipeline (front or back of 12 depending on the direction of movement of the pig); wherein the separation zone (10) is connected to a thruster pig return line (pipeline 14) which returns the thruster pigs to the holding zone (20); wherein the thruster pigs (12) are driven at speeds which are a multiple of a fluid speed (air speed) provided by the pressure system for the pipeline, thereby multiplying the capacity of the pipeline.

Regarding claims 1-5 it should be noted that the apparatus disclosed by Foreman is capable of performing the method steps as claimed by the applicant and also with regard to claim 3 Foreman discloses a fluid in the pipeline being a gas (air).

***Response to Amendment***

Applicant's amendments filed 6/27/2007 still fail to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has failed to clearly define the structure of "pigs", "thruster propulsion system" and "thruster pigs".

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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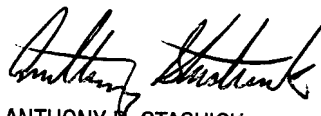
the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikansha S. Dwivedi whose telephone number is 571-272-7834. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
VSD

  
ANTHONY D. STASHICK  
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## Thesaurus

Go To	pig[1,noun]
	pig[2,verb]
	Pigs, Bay of

Main Entry: <sup>1</sup>pig

Pronunciation: 'pig

Function: *noun*Usage: *often attributive*Etymology: Middle English *pigge*1 : a young swine not yet sexually mature; *broadly* : a wild or domestic swine2 a : **PORK** b : the dressed carcass of a young swine weighing less than 130 pounds (60 kilograms) c : **PIGSKIN**3 a : one that resembles a pig <an unkempt... person is a *pig* -- S. S. Hall> b : an animal related to or resembling the pig

4 : a crude casting of metal (as iron)

5 *slang* : an immoral woman6 *slang, usually disparaging* : **POLICE OFFICER**- pig-like / -'lik/ *adjective*

## Dictionary Pronunciation Key

- \&\ as a and u in abut
- \[^&\ as e in kitten
- \&r\ as ur and er in further
- \a\ as a in ash
- \A\ as a in ace
- \ä\ as o in mop
- \au\ as ou in out
- \ch\ as ch in chin

- \e\ as e in bet
- \E\ as ea in easy
- \g\ as g in go
- \i\ as i in hit



- \j\ as j in job
- \[ng]\ as ng in sing
- \O\ as o in go

- \o\ as aw in law
- \oi\ as oy in boy
- \th\ as th in thin
- \[th\_]\ as th in the
- \ü\ as oo in loot
- \u\ as oo in foot
- \y\ as y in yet
- \zh\ as si in vision

### Dictionary Pronunciation Key

\&\ as a and u in

abut

\[^&]\ as e in kitten

\&r\ as ur and er in

further

\a\ as a in ash

\A\ as a in ace

\ä\ as o in mop

\au\ as ou in out

\ch\ as ch in chin

\e\ as e in bet

\E\ as ea in easy

\g\ as g in go

\i\ as i in hit

\I\ as i in ice

\j\ as j in job

\[ng]\ as ng in sing

\O\ as o in go

\o\ as aw in law

\oi\ as oy in boy

\th\ as th in thin

\[th\_]\ as th in the

\ü\ as oo in loot

\u\ as oo in foot

\y\ as y in yet

\zh\ as si in vision